

High Mountain Dams in Bonneville Unit,  
Fire Lake Dam (North Fork No. 5 Lake Dam)  
Wasatch National Forest  
3.8 miles west of Trial Lake Campground  
Kamas vicinity  
Summit County  
Utah

HAER No. UT-41-D

HAER  
UTAH,  
22-KAMN,  
1-D-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
Rocky Mountain Regional Office  
National Park Service  
U.S. Department of the Interior  
P.O. Box 25287  
Denver, Colorado 80537

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High Mountain Dams in Bonneville Unit, Fire Lake Dam  
(North Fork No. 5 Lake Dam)

HAER No. UT-41-D

Location: 3.8 miles west of Trial Lake Campground, Wasatch National Forest  
Kamas vicinity, Summit County, Utah

UTM: 12.498160.4502700  
Quad: Erickson Basin

Date of Construction: 1934

Builder/Designer: Provo Reservoir Company, Provo, Utah

Present Owner: Union Reservoir Company, Heber City, Utah 84032

Original Use: Dam

Present Use: Dam

Significance: Fire, Weir and Pot lakes, all built in 1934 by the Provo Reservoir Company, are indicative of the renewed local interest in reservoir-building sparked by the drought of 1931. They are historically significant as among the last examples of private reservoir construction in the Provo River drainage. The Fire Lake Dam is one of two (the other, Weir Lake Dam) masonry retention structures in the Bonneville Unit. Essentially unaltered and well-preserved, it is one of the most picturesque among those in the unit and is one of the most technologically important dams.

Inventoried by: Clayton Fraser and James Jurale  
Fraserdesign  
Loveland, Colorado

October 17, 1985

### HISTORICAL INFORMATION

The Provo Reservoir Company of Provo, Utah, received permission from the Forest Service to impound water on Fire and Island lakes in September 1914 and to build dams on the two in 1931. The fifth smallest among the dammed natural lakes in the Provo River drainage, Fire was one of the most scenic, with a steep, rocky shoreline dotted by conifers. Like the Weir Lake Dam, also built by the Provo Reservoir Company in 1934, the Fire Lake Dam featured a grouted fieldstone masonry upstream face, and loose, hand-placed rock on the sloped downstream side. The structure is picturesquely placed on smooth sloping glaciated bedrock with its downstream toe almost on the lip on a ledge. The outlet consisted of a reinforced concrete box culvert; the outlet gate was a standard Hardesty cast iron sliding gate secured by a 12-gauge pipe embedded in concrete (since replaced with a Calco cast iron slide). A double-gate concrete spillway on the dam's west edge is situated on quartzite ledge rock. It is proposed that a section of the dam be demolished to drain the lake to its natural level.

### ARCHITECTURAL INFORMATION

Dam length: 240 feet  
Dam height: 12 feet  
Dam width: 3 feet  
Construct: Grouted fieldstone masonry dam with stone riprap on downstream face  
Lake size: 12.4 acres; 286 acre-foot maximum capacity; 10 vertical foot maximum drawdown  
Outlet: Gated pipe; double-gated concrete spillway

### BIOGRAPHICAL INFORMATION

"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Provo River Drainage," National Forest Service Report, 1969, p. 20.

Specification for North Fork No. 1 under application No. 2077, Provo Reservoir Company, Lost Lake No. 2 Supplemental File, W-CNFSO, Federal Building, Salt Lake City, Utah.

Fire Lake Reservoir File #16-D. Kamas Ranger Station, Wasatch National Forest, Kamas, Utah

Field inspection by Clayton Fraser and Robert Righter, July 24, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.

High Mountain Dams in Bonneville Unit,  
Island Lake Dam  
HAER No. UT-41-E  
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